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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BOMAR, THOMAS S	

ART UNIT	PAPER NUMBER
3672	

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 10/680,440	**Applicant(s)** GRIGSBY ET AL.
Examiner Shane Bomar	**Art Unit** 3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *6/17, 2/22/05, etc*.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 1, the cross-referenced applications should be referenced with the US patent application number (i.e., 10/680,053) or the PGPub number (i.e., US 20050072564).

Appropriate correction is required.

Claim Objections

2. Claim 21 is objected to because of the following informalities: the recitation of "the continuous flow passage" lacks proper antecedent basis and should most likely be --a continuous flow passage--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 7-20, 25, 26, 28-35, 37-40, and 42-45 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent application publication 20020125008 to Wetzel et al.

Regarding claims 1 and 11, Wetzel et al disclose a method and system for completing a subterranean well comprising: positioning at least one assembly 18 in a wellbore 10; then inserting a portion of a tubular string 22 into an internal flow passage of the assembly; and attaching a fiber optic line 60 to the tubular string portion, the line extending within the internal flow passage (see Figs. 1-3 and paragraph [0031]).

Regarding claims 2-4, 25, 26, 39, and 40 (see rejection of claim 28 below), the fiber optic line is contained in a conduit and is pumped, or blown, into the conduit after the inserting of the tubular string (see paragraphs [0050]-[0055]).

Regarding claims 5, 12, and 30 (see rejection of claim 28 below), the assembly is a gravel packing assembly and the wellbore is gravel packed about the assembly (see paragraph [0026]).

Regarding claims 7, 19, and 28, there are at least first and second assemblies in the wellbore, wherein the inserting step further comprises inserting the tubular string portion into each of the assemblies, and wherein the attaching step further comprises attaching the fiber optic line to the tubular string portion so that the fiber optic line extends in each of the assemblies (see Figs. 1-3).

Regarding claims 8, 14, 15, 17, 31, 37, and 38, the fiber optic line 60 extends through packers and sealing devices wherein at least one of the sealing devices isolates the interior flow passage of the assembly from an annulus formed between the tubular string and the wellbore (see Figs. 1-3, 9, 10, and 17A).

Regarding claims 9 and 32-35, wherein a first flow control device interconnected in the tubular string controls flow between the flow passage in the first assembly and a first interior portion of the tubular string, and wherein a second flow control device interconnected in the tubular string controls flow between the flow passage in the second assembly and the first interior portion of the tubular string, whereby the control devices are controlled from a remote location (see paragraphs [0032] and [0046]).

Regarding claims 10, 16, 18, and 42-45, a portion 70 of the string is perforated (see paragraph [0033], but only shown in Figs. 4, 6, and 7), and while it is not explicitly recited, it is notoriously known in the art that the portion 70 of the string will open fluid loss control devices upon insertion of the portion 70 (see Figs. 1-3).

Regarding claim 13, at least a portion of the assembly is in an uncased portion of the wellbore (see paragraph [0024]).

Regarding claim 20, the assemblies are sealed to each other in the wellbore (see Figs. 1, 3, and 10).

Regarding claim 29, the tubular string receives fluid flowed from each of the first and second assemblies (see Figs. 1-3).

5. Claims 1, 7-9, 11, 13-17, 19-23, 28, 29, 31-35, 37, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 6,478,091 to Gano.

Regarding claims 1 and 11, Gano discloses a method and system for completing a subterranean well comprising: positioning at least one assembly 14 in a wellbore 20; then inserting a portion of a tubular string 36 into an internal flow passage of the assembly; and attaching a fiber optic line 17 to the tubular string portion, the line extending within the internal flow passage (see Figs. 1C-1E and col. 4, lines 22-25).

Regarding claims 7, 19, and 28, there are at least first 14 and second 16 assemblies in the wellbore, wherein the inserting step further comprises inserting the tubular string portion into each of the assemblies, and wherein the attaching step further comprises attaching the fiber optic line to the tubular string portion so that the fiber optic line extends in each of the assemblies (see Figs. 1C-1E).

Regarding claims 8, 14, 15, 17, 31, 37, and 38, the fiber optic line 60 extends through packers and sealing devices wherein at least one of the sealing devices isolates the interior flow passage of the assembly from an annulus formed between the tubular string and the wellbore (see Figs. 1C-1E and col. 4, lines 3-6).

Regarding claims 9 and 32-35, wherein a first flow control device 46 interconnected in the tubular string controls flow between the flow passage in the first assembly and a first interior portion of the tubular string, and wherein a second flow control device 48 interconnected in the tubular string controls flow between the flow passage in the second assembly and the first interior portion of the tubular string, whereby the control devices are controlled from a remote location (see col. 4, lines 7-17 and col. 5, line 51 through col. 8, line 30).

Regarding claim 13, at least a portion of the assembly is in an uncased portion of the wellbore (see col. 3, lines 20-21).

Regarding claim 16, the tubular string portion is perforated at 80 (see Fig. 4).

Regarding claims 20-23, the assemblies are sealed to each other in the wellbore, sealing engagement between the assemblies forms a continuous flow passage extending through the assemblies, the tubular string portion and the fiber optic line are inserted into the flow passage, and a sealing device 38, 40, 42, or 44 carried on the tubular string isolates the flow passage in one of the assemblies from the flow passage in another of the assemblies (see Figs. 1C-1E).

Regarding claim 29, the tubular string receives fluid flowed from each of the first and second assemblies (see Figs. 1C-1E).

6. Claims 1, 5-7, 11, 12, 14, 17, 19, 20, 28-30, 37, and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent 6,758,272 to Bixenman et al.

Regarding claims 1 and 11, Bixenman et al disclose a method and system for completing a subterranean well comprising: positioning at least one assembly 14 in a wellbore 15; then inserting a portion of a tubular string (i.e., the tubular end of assembly 12) into an internal flow passage of the assembly; and attaching a fiber optic line 30 to the tubular string portion, the line extending within the internal flow passage (see Fig. 1 and col. 2, line 54 through col. 3, line 5).

Regarding claims 5, 12, and 30 (see rejection of claim 28 below), the assembly is a gravel packing assembly and the wellbore is gravel packed about the assembly (see col. 3, lines 26-29).

Regarding claim 6, the inserting step is performed after the gravel packing step because assembly 14 is first gravel packed, and then the assembly 12 is inserted into 14 (see col. 3, line 66 through col. 4, line 19).

Regarding claims 7, 19, and 28, there are at least first and second assemblies in the wellbore, wherein the inserting step further comprises inserting the tubular string portion into each of the assemblies, and wherein the attaching step further comprises attaching the fiber optic line to the tubular string portion so that the fiber optic line extends in each of the assemblies (see Fig. 1).

Regarding claims 14, 17, 37, and 38, the fiber optic line 30 extends through packers and sealing devices (see Fig. 1).

Regarding claim 20, the assemblies are sealed to each other (see Fig. 1).

Regarding claim 29, the tubular string receives fluid flowed from each of the first and second assemblies (see Fig. 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 24 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wetzel et al, Gano, or Bixenman et al in view of US patent 6,349,770 to Brooks et al.

Either Wetzel et al, Gano, or Bixenman et al teach the system of claims 11 and 28 that includes a fiber optic line attached to a tubular. However, it is not explicitly taught that the fiber optic line extends through a telescoping travel joint interconnected in the tubular string.

Brooks et al teach a system that includes a control line 12 attached to a tubular similar to that of the above references. It is further taught that the control line extends through a telescoping travel joint interconnected in the tubular string (see Figs. 1 and 5-8, and col. 2, lines 8-12). It would have been obvious to one of ordinary skill in the art, having the teachings of Wetzel et al, Gano, or Bixenman et al and Brooks et al before him at the time the invention was made, to modify the fiber optic connections taught by Wetzel et al, Gano, or Bixenman et al to include the telescoping travel joint of Brooks et al, in order to obtain a joint that can expand and/or compress without damage to the control line. One would have been motivated to make such a combination since Brooks et al have shown it to be notoriously known in the art to use such connections with control lines and since protection of the control line would be advantageous in any downhole operation.

9. Claims 27 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wetzel et al in view of US patent 6,006,828 to Kluth et al.

Wetzel et al teach the system of claims 26 and 40 above that includes a fiber optic line pumped into a conduit. However, it is not expressly taught that the conduit includes a check valve that permits outward fluid flow from the conduit at the tubular string portion.

Kluth et al teach a conduit 31 that a fiber optic line is pumped through (see col. 5, lines 17-21). It is further taught that a check valve is in the conduit that permits outward fluid flow from the conduit at the tubular string portion (see col. 5, lines 20-21). It would have been obvious to one of ordinary skill in the art, having the teachings of Wetzel et al and Kluth et al before him at the time the invention was made, to modify the conduit taught by Wetzel et al to include the check valve of Kluth et al, in order to obtain a conduit that would not allow reverse fluid flow into the conduit containing the fiber optic line. One would have been motivated to make such a combination since Kluth et al have shown it to be notoriously known in the art to place a check valve in the conduit for this purpose, and because the references address the narrow problem of pumping fiber optic line through a conduit, a person seeking to solve that exact problem would consult the references and apply their teachings together.

Furthermore, this combination of references could analogously be applied to either Gano or Bixenman et al to show that it would be obvious for the latter two references to have a conduit with a check valve for pumping the fiber optic line through.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Andersen et al teach a tubular inserted into an assembly, the tubular opening a fluid loss control device in the assembly. Blacklaw, Martin, Smith, and Tubel et al teach various other wellbore applications of fiber optic lines.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David J. Bagnell
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tsb
June 26, 2005